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THE TAXONOMIC HISTORY OF THE SOUTH AND CENTRAL AMERICAN AKODONT RODENT GENERA: *THALPOMYS, DELTAMYS, THAPTOMYS, HYPSIMYS, BOLOMYS, CHROEOMYS, ABROTHRIX, SCOTINOMYS, AKODON* (*CHALCOMYS* AND *AKODON*), *MICROXUS, PODOXYMYS, LENOXUS, OXYMYCTERUS, NOTIOMYS,* AND *BLARINOMYS*

By G. H. H. Tate

In this paper, the sixth of my series, I have continued the treatment given in earlier papers. Since neither the several new akodont genera proposed by Thomas nor his "groups" of the subgenus *Akodon* (*sensu stricto*) appear to be sharply defined, geographic arrangement of the species has been particularly difficult and may prove unsatisfactory. Though wishing to preserve, as much as possible, the arrangement of genera made by Thomas (1916), I have felt that certain changes were desirable: *Zygodontomys* has been treated in my fifth paper, and the akodont genera are rearranged so as to include *Scotinomys* and the new genera *Deltamys* and *Hypsimys* and to place *Akodon* (*Akodon*) next to *Microxus*.

HISTORICAL STATEMENT[1]

THALPOMYS Thomas

1841. Lund described (p. 280) *Mus lasiotis* (n. sp.). The original description of "the smallest of all kinds" of Lagoa Santa rodents reads very like that of a *Hesperomys*.

1854. Burmeister added information about (p. 177) *lasiotis*, placing it in *Hesperomys* (*Calomys*).

1887. Winge gave a detailed description (p. 29) of "*Habrothrix*" *lasiotis*.

1898. Trouessart listed (p. 536) *lasiotis* in *Akodon*.

1916c. Thomas erected (p. 339) *Thalpomys*, n. g., with type *Mus lasiotis* Lund.

[1] A copy of the newly published 'A Manual of Neotropical Sigmodont Rodents,' by Nils Gyldenstolpe (Kungl. Svenska Vetenskapsakad. Handlingar, (3) XI, No. 3, pp. I–164 and plates, 1932) has just been received. This work should be consulted for each cricetid genus. It reached my hands too late to receive treatment under the generic headings.

DELTAMYS Thomas

1917*b*. Thomas erected (p. 98) *Deltamys*, n. g., related to *Akodon*, with type *Deltamys kempi*, n. sp. (which he compared with *Akodon arenicola*).

THAPTOMYS Thomas

1827. Lichtenstein described (Pl. XXXV) *Mus nigrita* (n. sp.).

1843. Wagner wrote of (p. 523) *nigrita* under *Hesperomys* (*Habrothrix*).

1854. Burmeister gave further information (p. 181) concerning *nigrita*.

1872. Hensel described (p. 44) *Hesperomys subterraneus*, n. sp., made type of *Thaptomys* by Thomas, in 1916.

1886. Leche described (p. 697) "*Hesperomys subterraneus* Hens. var. *henseli* var. nov."

1893. Von Ihering, in 'Os Mammiferos do Rio Grande do Sul.,' doubted (p. 17) the validity of Leche's separation of *henseli* from *subterraneus*.

1898. Trouessart listed (p. 537) *nigrita*, *subterraneus*, and *subterraneus henseli* in *Akodon*.

1902*a*. Thomas discussed (p. 62) under *Akodon subterraneus* the possible identity of that name with *nigrita*, *fuliginosus* (an *Akodon*), and *orycter*. (This last was a fossil form described by Winge (1887), who thought it near *Akodon cursor*.)

1916*c*. Thomas erected (p. 339) *Thaptomys*, n. g., with type *Hesperomys subterraneus* Hensel, and suggested that *nigrita* also belonged in it.

HYPSIMYS Thomas

1918. Thomas erected (p. 190) *Hypsimys*, n. g., which he compared with *Akodon*, *Deltamys*, and *Microxus*. The type species was *Hypsimys budini*, n. sp.

1920*a*. Thomas declared that *Akodon simulator* was intermediate in hypsodontism between *Hypsimys* and *Akodon arenicola*.

1921*c*. Thomas described (p. 613) *Hypsimys deceptor*, n. sp.

BOLOMYS Thomas

1858. Philippi and Landbeck described (p. 77) *Mus andinus*, n. sp., supposed representatives of which were compared by Thomas (1920) with *jucundus*.

1897*b*. Thomas described (p. 217) *Akodon albiventer*, n. sp.

1898*b*. Thomas described (p. 281) *Akodon berlepschii*, n. sp., pointing out the similarity of the skull to that of *Akodon mollis*.

1898. Trouessart listed (p. 535) the above species under *Akodon*.

1900*b*. Thomas described (p. 468) *Akodon amœnus*, n. sp., "probably most nearly allied to . . . *A. punctulatus*."

1900. Philippi further described (p. 22) and figured (Pl. VI) *andinus*.

1902*c*. Thomas remarked (p. 226) upon the near relationship of *albiventer* and *berlepschii* to one another.

1913*a*. Thomas described (p. 140) *Akodon jucundus*, n. sp., comparing it with *albiventer*, *andinus*, and *puer*.

1916*c*. Thomas erected (p. 339) *Bolomys*, n. g., with type *Akodon amœnus* Thomas, listing also in it *albiventer* and *berlepschii*.

1918. Thomas described (p. 188) *Akodon lactens*, n. sp.

1919*d*. Thomas described (p. 496) *Akodon orbus*, allied to *lactens*.

1920*b*. Thomas described (p. 418) *Akodon gossei*, n. sp., based upon material which he had earlier considered to be *andinus* (Philippii). He contrasted it with *jucundus* and *andinus*.

1926*a*. Thomas described (p. 312) *Bolomys negrito*, n. sp., comparing it with *albiventer* and "*B.* " *lactens*. *Lactens* when described (1918) was not placed in *Bolomys*.

1926*c*. Thomas remarked (p. 323) that m^1 of *albiventer* is notched.

1926*d*. Thomas wrote (p. 605): ". . . the curious blackish species recently described as *B. negrito* . . . may be merely a dark or semi-melanoid race of *B. lactens*."

CHROMYS Thomas

1847. Gay described (p. 108) *Orymicterus* (*sic*) *scalops* (n. sp.) (a *Notiomys*,—see remark under that genus).

1884. Thomas wrote of "*scalops*" (p. 455): ". . . his [Gay's] description . . . is too exact to admit any doubt that the present [specimen] is really his species . . . *H. scalops*, owing to its long claws, was placed in the subgenus *Oxymycterus* by its describer, but . . . the skull proves it to belong to *Habrothrix*, of which it is by far the most lightly marked member." (Renamed *jelskii* in 1894.)

1894. Thomas (pp. 360–361) applied the names *Acodon jelskii*, n. sp., and *Acodon jelskii pyrrhotis*, n. subsp., to the mice which he had identified as *scalops* (Gay in 1884).

1897*d*. Thomas described (p. 459) *Akodon pulcherrimus*, n. sp.

1898. Trouessart listed (p. 535) the described species of *Chrœomys* under *Akodon*.

1901*a*. Thomas, discussing the distribution of "*Akodon pulcherrimus* and its subspecies" (p. 184), described, besides typical *pulcherrimus*, *Akodon pulcherrimus cayllomæ*, n. subsp., *Akodon pulcherrimus inambarii*, n. subsp., and *Akodon pulcherrimus cruceri*, n. subsp.

1902*b*. Thomas described (p. 138) *Akodon bacchante*, n. sp.

1905. J. A. Allen suggested (p. 71) that *pulcherrimus* might represent a distinct subdivision of *Akodon*.

1913*a*. Thomas described (p. 141) *Akodon bacchante sodalis*, n. subsp.

1916*c*. Thomas erected (p. 340) *Chrœomys*, n. g., with type *Akodon pulcherrimus*, listing also in the genus *bacchante*, *jelskii*, "and probably *scalops* Gay" (the last a *Notiomys*).

1917*a*. Thomas described (p. 2) *Chrœomys inornatus*, n. sp.

1921*d*. Thomas added a great amount of additional description (p. 238) of *inornatus*.

1926*b*. Thomas suggested (pp. 317–318) that *jelskii pyrrhotis* might represent immature specimens of *jelskii jelskii*.

ABROTHRIX Waterhouse

1837. Waterhouse erected (p. 21) *Abrothrix*, n. subg. of *Mus*, with type *Mus longipilis* (n. sp.). He also referred to it (pp. 16–18) *Mus obscurus* (n. sp.) and *Mus olivaceus* (n. sp.) (both *Akodon*), *Mus brachiotis* (n. sp.) (an *Abrothrix*), *Mus xanthorhinus* (n. sp.), *Mus canescens* (n. sp.), and *Mus arenicola* (n. sp.) (the last three *Akodon*).

1839. Waterhouse further described (p. 49) *brachyotis* (*sic*) and (p. 55) *longipilis*.

1843. Gray raised (p. 114) *Abrothrix* to generic rank.

1843. Bridges wrote concerning the habits of *Mus longipilis* (p. 129).

1847. Gay wrote (pp. 113–116) concerning *longipilis* and *brachyotis* (*sic*).

1872. Philippi described (p. 446) *Mus brevicaudatus* (n. sp.), considering it near *brachiotis* (an *Abrothrix*).

1895. Thomas described (p. 370) *Acodon hirtus*, n. sp., comparing it with *longipilis*.

1898. Trouessart listed (p. 535) the speciesof *Abrothrix* under *Akodon*.

1900. Philippi described a large number of species of "*Mus*," three of which (*dumetorum*, *brachitarsus*, and *fusco-ater*) Wolffsohn (1910) synonymized with *longipilis*.

1903*c*. Thomas described (p. 241) *Akodon suffusus*, n. sp., which he compared with *hirtus* and *longipilis*. *Suffusus* was made a subspecies of *hirtus* in 1927.

1908. Thomas described (p. 497) *Akodon francei*, n. sp., allied to *longipilis*, *hirtus*, and *suffusus*.

1910. Wolffsohn synonymized three of Philippi's (1900) names with *longipilis*.

1916*c*. Thomas reinstated, in restricted form distinct from *Akodon* (p. 340), *Abrothrix* Waterhouse, which, since 1894, had been considered a synonym of the former. He listed in it *longipilis* (the type), *hirtus*, *suffusus*, and *francei*.

1919*b*. Thomas described (p. 202) *Abrothrix suffusus modestior*, n. subsp., and *Abrothrix suffusus mœrens*, n. subsp.
He remarked that *brachiotis* Waterhouse should be listed in *Abrothrix*.

1925*b*. Thomas described (p. 582) *Abrothrix illutea*, n. sp.

1927*b*. Thomas listed (p. 551) the British Museum lectotype of *brachiotis*, 55.12.24.166, Islet in Midship Bay, Chonos Archipelago, Chile; and lectoparatype, 55.12.24.166, Islet off east coast of Chiloe. "This latter specimen is not an *Abrothrix*, but is referable to a species of *Akodon*."

1927*d*. Thomas stated (p. 201) "*A. hirtus* and *A. suffusus* . . . pass into each other and should be united specifically under the former name."

1929. Thomas gave (p. 40) a brief diagnosis of the subspecies of *hirta* and described *Abrothrix hirta nubila*, n. subsp.
He remarked (p. 41) upon the high altitude habitat of *illutea*, correcting the original statement of altitude (400 m.) to 3000–4000 meters.

SCOTINOMYS Thomas

1876. Alston described (p. 755) *Hesperomys teguina*, n. sp.[1]

1880. Alston remarked further upon *teguina* (p. 144). He placed it (p. 142) provisionally in "*Hesperomys* (*Vesperomys*)."

1898. Trouessart listed (p. 537) *teguina* under *Akodon*.

1902. Bangs described (p. 40) *Akodon teguina apricus*, n. subsp., and (p. 41) *Akodon xerampelinus*, n. sp.

1904*a*. J. A. Allen described (p. 46) *Akodon irazu*, n. sp.

[1]Gray listed the name *teguina* (a *nomen nudum*) as early as 1843 (Proc. Zool. Soc. London, p. 79).

1913*b*. Thomas erected (p. 408) *Scotinomys*, n. g., with type *Hesperomys teguina* Alston, and included *teguina apricus*, *xerampelinus*, and *irazu*. He compared the new genus with *Akodon* and *Zygodontomys*.

AKODON (CHALCOMYS) Thomas

1893. Allen and Chapman remarked upon (p. 217) "*Abrothrix caliginosus*" from Trinidad. (Redescribed in 1897 as *Akodon urichi*.)

1897. Allen and Chapman described (p. 19) *Akodon urichi*, n. sp., based upon the material referred by them in 1893 to *caliginosus*. They also described (p. 20) *Akodon frustrator*, n. sp., based upon two juveniles which I believe are the young of *Zygodontomys brevicauda*.

1898. Trouessart listed (p. 535) the species of *Chalcomys* in *Akodon*.

1899. J. A. Allen described (p. 203) *Akodon venezuelensis*, n. sp., superficially like *Melanomys*.

1904*b*. J. A. Allen described (p. 329) *Akodon meridensis*, n. sp. In 1913 (p. 408) Thomas suggested that it might be a *Zygodontomys*. I have examined the type, however, and it seems to be *Akodon*.

1913*b*. Thomas described (p. 406) *Akodon ærosus*, n. sp. (Specimens of this animal had previously been alluded to by J. A. Allen and Thomas in various papers under Tomes's name *caliginosus*, which is a *Melanomys* of rather similar appearance.)

1913*a*. J. A. Allen described (p. 480) *Akodon tolimæ*, n. sp.

1913*b*. J. A. Allen described (p. 600) *Akodon chapmani*, n. sp.

1915. Osgood described (p. 192) *Akodon ærosus baliolus*, n. subsp.

1916. Osgood described (p. 208) *Akodon dayi*, n. sp. "The only available species of this region which shows even slight similarity is *A. cursor* . . . ."

1916*c*. Thomas erected (p. 338) *Chalcomys*, n. subg. of *Akodon* (restricted in same paper), with type *Akodon ærosus*. He placed *urichi*, *venezuelensis*, and *meridensis* in *Chalcomys*.

AKODON (AKODON) Meyen

1802. Azara described (p. 94) his AGRESTE, given the scientific name *Mus? (sic) azaræ* by Fischer in 1829. I have suggested in Amer. Mus. Novit., No. 557, that this mouse was an *Akodon*.

1827. Lichtenstein described (Pl. XXXV) *Mus nigrita* (n. sp.) (a *Thaptomys*).

1829. Fischer applied (p. 324) the name *Mus? (sic) azaræ* to Azara's AGRESTE.

1832. Meyen erected (p. 600) the genus *Akodon* to contain *Akodon "boliviense,"* n. sp.

1837. Waterhouse erected (p. 21) *Abrothrix,* n. subg. of *Mus* (until 1916 treated as a synonym of *Akodon*) with type *Mus longipilis* (n. sp.). He also referred to it (pp. 16–18) *Mus obscurus* (n. sp.), *Mus olivaceus* (n. sp.), *Mus xanthorhinus* (n. sp.), *Mus canescens* (n. sp.), and *Mus arenicola* (n. sp.). (All five names belong in *Akodon.*)

1839. Waterhouse further described (p. 48) *arenicola;* (p. 51) *olivaceus* which he renamed *renggeri,* a synonym; (p. 52) *obscurus;* (p. 53) *xanthorhinus;* and (p. 54) *canescens.* (He corrected a slight error in the tail measurements of the last, given in 1837.)

1841. Lund described briefly (p. 280) *Mus lasiotis* (made type of *Thalpomys* by Thomas, 1916).

1842. Gervais described (p. 51) *Mus rupestris* from a skeleton picked up in Cobija, Bolivia.

1843. Wagner retained (p. 466) *Akodon* with its then single species *boliviense* as a full genus. *Hesperomys* (*Habrothrix*) (p. 516) was made to include the remaining species as follows: *longipilis* (an *Abrothrix*), *olivaceus* (=*renggeri*), *obscurus, arenicola, xanthorhinus, canescens,* and *nigrita* (a *Thaptomys*).

1844. Waterhouse described (p. 154) *Hesperomys megalonyx,* n. sp. (a *Notiomys*).

1844. Tschudi commented upon (p. 177) *boliviense,* and emended the spelling of *Akodon* Meyen to *Acodon.*

1845. Wagner described (p. 148) *fuliginosus* (n. sp.) and *caniventris* (n. sp.).

1847. Gay gave notes (pp. 113–116) on *olivaceus, "rupestris,"* and *"xanthorhinus."*

He tried to show that a certain Chilean mouse was identical with the *rupestris* Gervais of Cobija, Bolivia. Both were illustrated in the 'Atlas,' plates VI and VII.

1850. Wagner added (pp. 314–315) to his descriptions of *fuliginosus* and *caniventris.* He stated that he was ignorant of the place of origin of *caniventris* in Brazil.

1855. Burmeister (1854) commented upon (pp. 11–12) *Akodon boliviense* Meyen.

1858. Philippi described (p. 77) *Mus andinus*, n. sp. (apparently a *Bolomys*, see Thomas (1920)), and (p. 79) *Mus pusillus* (probably *Akodon olivaceus*), with which Allen compared *lutescens* in 1901.

1872. Philippi described (p. 446) *Mus brevicaudatus* (n. sp.) (=?*Akodon olivaceus*), considering it nearest to *brachiotis* (an *Abrothrix*).

1872. Hensel referred (p. 39) a mouse from Rio Grande do Sul, Brazil, doubtfully to *arenicola* of Uruguay.

1879. Burmeister listed (pp. 216–217) *arenicola* and *obscurus* in *Hesperomys* (*Habrothrix*). He placed the AGRESTE of Azara (=*Mus azaræ* Fischer) in the synonymy of *arenicola*. *Canescens* was put at the end of the subgenus *Calomys*.

1883. Pelzeln commented upon *fuliginosus* (p. 70).

1884. Thomas, after defining *Habrothrix*, subgenus of *Hesperomys*, included (p. 450) all *Akodon*-like mice except *Oxymycterus* in *Habrothrix*, mentioning specifically *longipilis*, *olivaceus*, *xanthorhinus*, . . . "about 20 in number."

His "*scalops*" included *Chrœomys jelskii* and *C. j. pyrrhotis*. His "*olivaceus*" from Peru was probably an *Akodon* of a different species and his "*xanthorhinus*" was *Akodon puer* (see 1926).

1886. Leche, writing of *arenicola* from Rio Grande do Sul, stated (p. 698) that Thomas had compared his material with Waterhouse's original animal and had found them identical. He pointed out discrepancies in Waterhouse's drawings of the skull ('Voyage of the "Beagle"') and gave much additional data upon the species.

1888. Winge described (p. 25) *Habrothrix cursor*, n. sp. (probably an *Akodon*).

1891. Thomas in Milne-Edwards published plates (v and vi) showing *olivaceus*, "*xanthorhinus*," and *longipilis*. The skin of "xanthorhinus" was described by Thomas as *Oxymycterus lanosus* (a *Microxus*) in 1897.

1894. Thomas decided (p. 360) that *Habrothrix*, which he had hitherto employed for all akodonts, must be placed in the synonymy of *Acodon* (*sic*) Meyen.

He described (pp. 360–361) *Acodon jelskii* and *Acodon jelskii pyrrhotis*, n. subsp. (both *Chrœomys*).

He described *Acodon punctulatus*, n. sp. (remarking upon certain *Oryzomys*-like features of the skull), *Acodon*

macronyx, n. sp., (a *Notiomys*), and *Acodon mollis*, n. sp., "northern representative of *A. olivaceus*."

1895. Thomas described (p. 369) *Acodon bogotensis*, n. sp. (a *Microxus*), comparing it with "*Melanomys caliginosus*" (probably *Akodon ærosus*) and *Scotinomys teguina*.

He described (p. 370) *Acodon hirtus*, n. sp. (an *Abrothrix*, as restricted by Thomas, 1916).

1896*a*. Thomas, in 'Genera of Rodents,' listed "*Acodon* Meyen," with *Abrothrix* Waterhouse as a synonym.

1897*a*. Thomas described (p. 496) *Akodon fuscinus*, n. sp. (a *Zygodontomys*), comparing it with *lasiurus* (Lund), which I have suggested in an earlier paper may also have been a *Zygodontomys*, and with *olivaceus* (Waterhouse).

1897*b*. Thomas described (p. 216) *Akodon spegazzinii*, n. sp., compared with *olivaceus* but stated to be colored more like a fulvous *Oryzomys*.

He also described (p. 217) *Akodon albiventer*, n. sp. (a *Bolomys*), comparing it with *spegazzinii*.

1897*d*. Thomas described (p. 549) *Akodon pulcherrimus* (n. sp.) (a *Chrœomys*).

1898*a*. Thomas doubted (p. 211) the distinctness of *canescens* and *arenicola*.

1898*b*. Thomas described (p. 281) *Akodon berleppschii*, n. sp. (a *Bolomys*).

1898*c*. Thomas described (p. 271) *Akodon lenguarum*, n. sp., comparing it with *obscurus*.

1898. Trouessart listed (p. 535) *Akodon* full genus with *Abrothrix* or *Habrothrix* as a synonym. The genus was divided into two subgenera, *Drymomys* and *Akodon*.

Akodon included all the generic groups distinguished by Thomas in 1916, as well as *Scotinomys*.

Furthermore, the following species, belonging to modern genera as indicated, were listed in *Akodon*.—*Oryzomys: magellanicus, caliginosus. Zygodontomys: fuscinus, lasiurus. Euneomys: micropus. Delomys: dorsalis, dorsalis obscura. Notiomys: megalonyx, macronyx, valdivianus, niger.*

Philippi's names *andinus, melanonotus, porcinus, pusillus* (all 1858), and *brevicaudatus* (1872) were listed in *Akodon*.

1898. Matschie wrote (pp. 4–5) concerning *valdivianus* and *michaelseni* (both *Notiomys*) under "*Hesperomys* (*Acodon*)."

His notes (pp. 6–7) upon *olivaceus* and *xanthorhinus* were also placed under *Hesperomys* (*Acodon*).

1899. J. A. Allen described (p. 203) *Akodon venezuelensis*, n. sp. (a *Chalcomys*) and *Akodon columbianus*, n. sp., removed in 1904 (Bull. Amer. Mus. Nat. Hist., XX, p. 437), to *Oryzomys* (*Melanomys*).

1900*b*. Thomas described (p. 468) *Akodon amœnus*, n. sp. (a *Bolomys*).

1900. Philippi described a large number of Chilean mice under the generic name *Mus*, seven of which—*lepturus*, *trichotis*, *vinealis*, *senilis*, *germaini*, *nasica*, and *ruficaudus*—have been synonymized by Wolffsohn (1910) with *Akodon olivaceus*. He further described *andinus* and *pusillus*.

For Philippi's names which are synonymous with *longipilis*, see *Abrothrix*.

1901*a*. Thomas, discussing (p. 184) "*Akodon pulcherrimus* and its subspecies" (*Chrœomys*), described three new subspecies: *pulcherrimus cayllomæ*, *pulcherrimus inambarii*, and *pulcherrimus cruceri*.

1901. J. A. Allen described (p 46) *Akodon lutescens*, n. sp. He compared it with "*A. pusillus* (Philippi)," one of the many dubious names proposed by Philippi. Philippi's description and figure of *pusillus* probably refer to a specimen of *Akodon olivaceus*.

1901. J. A. Allen described (p. 410) *Akodon tucumanensis*, n. sp. of the *olivaceus* group.

1902. Bangs described (p. 40) *Akodon teguina apricus*, n. subsp., and (p. 41) *Akodon xerampelinus*, n. sp. (both *Scotinomys*).

1902*a*. Thomas discussed (p. 60) *Akodon cursor* (Winge) and described (p. 61) *Akodon serrensis*, n. sp., which he compared with *arenicola*. He also discussed *Akodon subterraneus* (see under *Thaptomys*).

1902*b*. Thomas described (p. 134) *Akodon varius*, n. sp., which he compared with but distinguished sharply from *hirtus* (an *Abrothrix*); (p. 135) *Akodon pacificus*, n. sp., which he likened to *olivaceus* and *mollis*, mentioning the difficulty of working out the *olivaceus* species; (p. 136) *Akodon puer*, n. sp., a member of the olive-colored group allied to *xanthorhinus; Akodon fumeus*, n. sp., which he compared with *mollis;* and *Akodon bacchante*, n. sp. (a *Chrœomys*).

1903*c*. Thomas erected (p. 242) *Chelemys*, n. subg. of *Akodon* and described *Akodon* (*Chelemys*) *vestitus*, n. sp. (placed by Osgood in *Notiomys* in 1925).

1904*a*. J. A. Allen described (p. 46) *Akodon irazu*, n. sp. (a *Scotinomys*).

1904*b*. J. A. Allen described (p. 329) *Akodon meridensis*, n. sp. (by Thomas, 1916, placed in subgenus *Chalcomys*).

1904. Palmer recited (p. 87) modifications of spelling in *Akodon* employed by various authors.

1905. J. A. Allen proposed tentatively (pp. 70–71) several divisions of the genus *Akodon*. He redescribed *xanthorhinus* and *canescens* and included in *Akodon*, *suffusus*, *A.* (*Chelemys*) *vestitus* and *A.* (*Chelemys*) *michaelseni*.

1905. Ribeiro described (p. 188) *Hesperomys* (*Akodon*) *serrensis leucogula* (n. subsp.).

1905. Trouessart altered (pp. 432–435) his subgeneric arrangement of 1898 (listing *Akodon* with three subgenera, *Akodon*, *Drymomys*, and *Chelemys*). Apart from the inclusion of new species, and the separation of *Chelemys*, no marked changes were made in the previous list of species.

A list of Philippi's (1900) names was given (p. 435) with the suggestion that they might belong in *Akodon*.

1908. Thomas described (p . 497) *Akodon francei*, n. sp. (an *Abrothrix*).

1910. Wolffsohn synonymized a number of Philippi's (1900) names under *Akodon olivaceus*.

1913*a*. Thomas described (pp. 140–141) *Akodon jucundus*, n. sp. (a *Bolomys*), comparing it with *andinus* (Philippi), *albiventer*, *spegazzinii*, and *puer;* he also described *Akodon bacchante sodalis*, n. subsp. (a *Chrœomys*).

1913*b*. Thomas described (p. 404) *Akodon mollis altorum*, n. subsp.; and (p. 405) *Akodon arviculoides montensis*, n. subsp., comparing it with *cursor*. (It seems probable that *arviculoides* Wagner was a *Zygodontomys* rather than an *Akodon* and I have so placed it in Amer. Mus. Novit., No. 581. It is unlikely, however, that Thomas had before him anything other than a true *Akodon* when he described *montensis*, and I have therefore included *Akodon montensis* in the list on page 25).

He described (p. 406) *Akodon ærosus*, n. sp. (in 1916 made type of subgenus *Chalcomys*).

1913*a*. J. A. Allen described (p. 480) *Akodon tolimæ*, n. sp. (a *Chalcomys*).

1913*b*. J. A. Allen described (p. 600) *Akodon chapmani*, n. sp. (a *Chalcomys*).

1913. Osgood described (pp. 98–100) *Akodon mollis orophila*, n. subsp.,

and *Akodon mollis orientalis*, n. subsp. Thomas (see *Microxus*, 1921 and 1926) was inclined to place these forms in *Microxus*, but returned them (*Microxus*, 1927) to *Akodon*.

1914. Osgood constructed (p. 163) a short key to the four subspecies of *mollis*.

1915. Osgood described (p. 192) *Akodon ærosus baliolus*, n. subsp. (a *Chalcomys*).

1916*a*. Thomas corrected (p. 187) his determination of *xanthorhinus*, which in Milne-Edwards, 1890, he had referred to "*olivaceus*." His "*xanthorhinus*" of the same paper was renamed by him *lanosus* in 1897 (see under *Microxus*).

1916*b*. Thomas described (p. 334) *Akodon dolores*, n. sp., allied to *obscurus*, *lenguarum*, and *varius;* and (p. 335) *Akodon simulator*, n. sp., allied to *dolores*, but colored as *Abrothrix*.

1916*c*. Thomas divided (pp. 336–340) the old genus *Akodon* into six distinct generic groups: *Akodon* (restricted); *Thalpomys*, containing only *lasiotis* (Lund); *Thaptomys*, containing *subterraneus* and *nigrita* (?); *Bolomys*, containing *amœnus*, *albiventer*, and *berlepschii;* *Chrœomys*, containing *pulcherrimus*, *bacchante*, *jelskii*, "and probably *scalops*" (a *Notiomys*); and *Abrothrix*, with the species *longipilis*, *hirtus*, *suffusus*, and *francei*.

Zygodontomys was removed from the oryzomine assemblage and added to the above akodont genera. *Scotinomys* was not mentioned.

Furthermore, the restricted *Akodon* was divided into two subgenera, *Akodon* and *Chalcomys*, the latter to contain the *Melanomys*-like forms *ærosus*, *urichi*, *venezuelensis*, *meridensis*, etc.

Thomas suggested (p. 339) that *Akodon*, subgenus, might be even further divided.

1916. Osgood described (p. 208) *Akodon dayi*, n. sp. (a *Chalcomys*?).

1917*a*. Thomas described (p. 2) *Akodon surdus*, n. sp., "allied to *Akodon mollis*."

1917*b*. Thomas described (p. 97) *Akodon arenicola hunteri*, n. subsp.

1918. Thomas described (p. 188) *Akodon lactens*, n. sp. (a *Bolomys*), allied in skull characters to *obscurus*, and *Akodon puer cænosus*, n. subsp.

1919*a*. Thomas described (p. 116) *Akodon glaucinus* n. sp., very close to *varius* and *simulator*.

1919*b*. Thomas described (p. 204) *Akodon beatus*, n. sp., allied to "*olivaceus-arenicola* group."

He stated (p. 205) that the "primary type" of *canescens* was British Museum No. 55.12.24.157, and that of *xanthorhinus* 55.12.24.156. Remarking that two distinct groups of *Akodon*, which he briefly characterized and styled A and B, exist in "the area concerned" (the Patagonian region?) he added that since both *canescens* and *xanthorhinus* belonged in B, a new name was needed for A. He proposed *iniscatus*, new name, and referred certain of Darwin's specimens to it.

He described *Akodon iniscatus collinus*, n. subsp. He suggested (p. 207) that *canescens* might prove to be a "grey seasonal phase of the yellowish *xanthorhinus*."

1919*c*. Thomas described (p. 213) *Akodon neocenus*, n. sp., allied to *varius* (but see Ann. Mag. Nat. Hist., 1927, XX, p. 205), and (p. 214) *Akodon benefactus*, n. sp., related to *obscurus* and *lenguarum*.

1919*d*. Thomas described (p. 496) *Akodon alterus*, n. sp., allied to *spegazzinii*, remarking upon the color of the latter, and *Akodon orbus*, "a proodont *Akodon* allied to *lactens*" (a *Bolomys* ?).

1919*e*. Thomas described (p. 155) *Akodon tartareus*, n. sp., allied to *varius*.

1920*a*. Thomas pointed out (p. 192) that *simulator* is intermediate as regards hypsodontism between *arenicola* and *Hypsimys* and that its color is unusually variable.

He recognized (p. 192) *cænosus*, formerly a subspecies of *puer*, as a full species.

1920*b*. Thomas described (p. 418) *Akodon gossei*, n. sp. (a *Bolomys* ?), based upon material which he had previously considered to be *andinus* (Philippi). He contrasted it with *Bolomys jucundus*.

1921*a*. Thomas described (p. 178) *Akodon toba*, n. sp., allied to *simulator*.

1921*b*. Thomas described (p. 184) *Akodon sylvanus*, n. sp., allied to *arenicola hunteri*.

1921*d*. Thomas further described (p. 236) *surdus* and recorded 86 specimens of an *Akodon* which he referred to *boliviensis* Meyen.

He considered (p. 240) that Osgood's (1914) key to the subspecies of "*mollis*" showed in reality those differences in the zygomatic plates which he (Thomas) considered as of

generic value in distinguishing *Microxus* from *Akodon*. In consequence he concluded that *Akodon mollis orientalis* Osgood was almost if not quite equivalent to *Microxus torques* Thomas.

He concluded by stating that the reduced eyes and long head visible in spirit specimens of *Microxus* showed it to be quite distinct from *Akodon*.

1924. Anthony suspected (p. 4) *Microxus affinis* Allen to be an *Akodon* (see *Microxus*).

1925*a*. Thomas indicated (p. 579) that *obscurus*, *lenguarum*, *benefactus*, *lactens*, and *orbus* belonged in a single group; and that *glaucinus* and *simulator* might be subspecies of *varius*.

He described (p. 579) *Akodon sylvanus pervalens*, n. subsp.

1926*b*. Thomas stated (p. 317) that his "*Hesperomys* (*Habrothrix*) *xanthorhinus*" of 1884 should be corrected to *Akodon puer*.

1926*c*. Thomas commented (p. 322) upon *tartareus* and *pacificus*.

He suggested (pp. 322–323) that his *sylvanus pervalens* might be quite distinct from *sylvanus* and closer to *tartareus*.

1926*d*. Thomas, after stating that certain specimens which he had named *cænosus* were really *tucumanensis*, wrote (p. 604): "Most readily to distinguish skulls of the three *Akodons* [*varius simulator*, *tucumanensis* and *cænosus*] in the present collection, dividers may be set at 3.2 mm., a dimension which will approximately fit the first molar+half the second of *A. varius simulator*, the two first molars of *tucumanensis* and the whole row of *cænosus*."

He referred *lactens* (1918) to *Bolomys*.

1926*f*. Thomas described (p. 636) *Akodon nucus* n. sp., "most allied to the latter [*iniscatus*]."

1926. Cabrera described (p. 320) *Akodon leucolimnaeus*, n. sp., from Laguna Blanca, Catamarca. (Not to be confused with Lago Blanco, type locality for *iniscatus*.)

1927*a*. Thomas transferred (p. 370) *Microxus torques* to *Akodon* (see also *Microxus*).

1927*b*. Thomas listed (pp. 550–551) the British Museum lectotypes of *Akodon* as follows:

obscurus	55.12.24.161, Maldonado, Uruguay, with lectoparatype 55.12.24.165, Maldonado.
olivaceus	55.12.24.200, Valparaiso, Chile, with lectoparatypes 55.12.24.160 and 164, Coquimbo, Chile.

canescens 55.12.24,157, Sta Cruz, Patagonia, with lectoparatype 55.12.24.173, Port Desire, Patagonia. "This latter is an immature *A. iniscatus* Thomas."

xanthorhinus 55.12.24.168 (with footnote correcting errors in Allen, 1905, and Thomas, 1919, p. 205), 55.12.24.158, Hardy Peninsula, Tierra del Fuego, with lectoparatype, 55.12.24.168.

1927*d*. Thomas remarked (pp. 204–205) that *neocenus* appeared to be nearest to *dolores* and compared it with *nucus*.

1929. Thomas wrote (p. 41) "I am now fairly satisfied that *A. canescens* should be united with *A. xanthorhinus* . . . " He gave (p. 42) distinguishing characters for *iniscatus* and *xanthorhinus*.

Microxus Thomas

1872. Hensel wrote of "*nasutus*" (p. 43), renamed *iheringi* by Thomas in 1896.

1886. Leche added remarks (p. 700) concerning "*nasutus*" of Hensel.

1891. Thomas in Milne-Edwards applied the name "*xanthorhinus*" to a skin and skull which in 1897 he redescribed as *lanosus*.

1895. Thomas described (p. 369) *Acodon bogotensis*, n. sp. (transferred in 1901 to *Oxymycterus* and in 1909 to *Microxus*).

1896*b*. Thomas described (p. 308) *Oxymycterus iheringi*, n. sp. (see Hensel, 1872, and Leche, 1886). He added that it was atypical for *Oxymycterus* and probably near the fossil *talpinus* Winge (Lund?). He suggested its possible relationship to *Blarinomys*.

1897*b*. Thomas described (p. 218) *Oxymycterus lanosus*, n. sp., based upon a skin and skull identified by him in 1891 as *Hesperomys xanthorhinus* (an *Akodon*).

1901*a*. Thomas discussed (p. 184) *bogotensis* under the generic name *Oxymycterus*.

1905. Cabrera described (p. 15) *Oxymycterus delfini*, n. sp. (perhaps a *Microxus*).

1909. Thomas erected (p. 237) *Microxus*, n. g., with type *Oxymycterus mimus*, including in addition *iheringi*, *lanosus* and *bogotensis*.

1912. Osgood remarked (p. 52) upon specimens of *bogotensis* from Tama on the border of Colombia and Venezuela.

1912. J. A. Allen described (p. 89) *Microxus affinis*, n. sp., comparing it with *bogotensis*.

1916. J. A. Allen stated (p. 216) that *affinis* was much larger than *bogotensis* and in coloration nearer to *mimus*.

1917*a*. Thomas described (p. 3) *Microxus torques*, n. sp., "near *Microxus mimus*."

1921*d*. Thomas further described (p. 239) *torques*.

He emphasized the distinctness of *Microxus* from *Akodon* as shown by the long head and small eyes of the former, but admitted a certain amount of intergradation in the degree of slant of the zygomatic plate. He implied that *Akodon mollis orophilus* and *A. m. orientalis* of Osgood, 1914 (see *Akodon*), might in reality be *Microxus*. This view, I suspect, was based upon their anomalous zygomatic plates rather than upon other *Microxus*-like characters. (See also Thomas, 1927.)

1924. Anthony described (p. 3) *Microxus latebricola*, n. sp. He suspected (p. 4) *affinis* Allen to be an *Akodon*.

1926*c*. Thomas definitely removed (pp. 615–616) *orophilus* and *orophilus orientalis*, both described by Osgood (1913) as *Akodon*, to *Microxus*.

1927*a*. Thomas, following the advice of Hinton, more or less reversed (p. 370) his opinion of 1921 and 1926, and removed *orophilus* and *torques* to *Akodon*. However he maintained that *Microxus* was a good genus, retaining in it *mimus*, *bogotensis* and *lanosus*.

PODOXYMYS Anthony

1929. Anthony erected (p. 4) *Podoxymys*, n. g., with type *Podoxymys roraimæ*, n. sp.

LENOXUS Thomas

1900. J. A. Allen described (p. 224) *Oxymycterus apicalis*, n. sp.

1909. Thomas erected (p. 236) *Lenoxus*, n. g., with type *Oxymycterus apicalis* Allen.

OXYMYCTERUS Waterhouse

1801. Azara described (p. 94) RAT CINQUIÈME OU RAT ROUX, the basis of *Mus rufus* Desmarest (an *Oxymycterus*).

1802. Azara wrote concerning the same rat (p. 80) under the name HOCICUDO.

1819. Desmarest named (p. 62) the RAT ROUX of Azara *Mus rufus* (n. sp.).
1826. Wied described (p. 425) *Hypudæus dasytrichus* (n. sp.).
1830. Rengger gave his own observations (p. 230) on *rufus*.
1837. Waterhouse erected (p. 20) *Oxymycterus*, n. subg. of *Mus*, including in it (p. 16) *nasutus* (n. sp.)
1839. Waterhouse further described (p. 56) *nasutus*.
1842. Wagner described (p. 361) *Hesperomys* (*Oxymycterus*) *rostellatus* (n. sp.), stating that it was purchased from the nature dealer, Brandt.
1843. Pictet described (p. 211) *Oxymycterus hispidus*, n. sp.
1843. Wagner, under *Hesperomys* (*Oxymycterus*), listed (p. 514) *nasutus* and *rostellatus*, amplyfying the description of the latter. *Rufus*, whose home he described as "Paraguay in the neighborhood of Asuncion," was listed (p. 540) in *Hesperomys*.
1845. Schinz described (p. 179) *Mus hispidulus* (n. sp.), apparently a renaming of *hispidus* Pictet and therefore a synonym.
1847. Gay described (p. 108) *Oxymicterus* (*sic*) *scalops* (n. sp.) (a *Notiomys*) and transferred to *Oxymicterus* Waterhouse's *Hesperomys megalonyx* (a *Notiomys*).
1854. Burmeister commented upon (p. 183) "*rufus*," including in its synonymy *rostellatus* and *dasytrichos* (*sic*).
1858. Philippi described (p. 303) *Oxymycterus valdivianus* (n. sp.) (a *Notiomys*).
1861. Tomes raised (p. 285) *Oxymicterus* (*sic*) to generic rank.
1872. Philippi described (p. 445) *Oxymycterus niger* (n. sp.), doubtfully referred by Osgood (1925, p. 121) to *Notiomys*.
1872. Hensel wrote of "*nasutus*" (p. 43) renamed *iheringi* by Thomas in 1896, comparing it with *Akodon arenicola*. It is now in *Microxus*.
1879. Burmeister wrote some generalized remarks (p. 215) upon "*nasutus*."
1883. Pelzeln wrote of "*nasutus*" (p. 74), recording it from Ypanema, Brazil. He also recorded "*rufus*" from Ytararé, near Ypanema.
1884. Thomas defined (p. 450) *Oxymycterus*, subgenus of *Hesperomys*, listing as species *nasutus*, *hispidus*, and *rufus*.
1886. Leche added remarks (p. 700) concerning "*nasutus*" of Hensel, 1872.

1887. Winge wrote extensively (p. 36) upon "*Oxymycterus rufus* Desm."

1895. Thomas described (p. 369) *Acodon bogotensis*, n. sp. (listed in 1901 as an *Oxymycterus* and in 1909 as a *Microxus*).

1896*b*. Thomas described (p. 308) *Oxymycterus iheringi*, n. sp. (a *Microxus*).

1897*b*. Thomas described (p. 218) *Oxymycterus lanosus*, n. sp. (transferred in 1909 to *Microxus*).

1898. Trouessart placed *rostellatus* and *dasytrichos* in the synonymy of *rufus*, and *hispidulus* Schinz in the synonymy of *hispidus* Pictet.

1900*a*. Thomas described (p. 298) *Oxymycterus inca*, n. sp.

1900. J. A. Allen described (p. 223) *Oxymycterus juliacæ*, n. sp., near *inca*, and (p. 224) *Oxymycterus apicalis*, n. sp. (a *Lenoxus*).

1900. Philippi described several rats under "*Mus* (*Oxymycterus*)," which are referable to different genera.

1901*a*. Thomas described (p. 183) *Oxymycterus iris*, n. sp., which he compared with *inca* and *juliacæ*, and *Oxymycterus mimus*, n. sp., a "member of the group of small *Akodon*-like *Oxymycteri*, the nearest ally being *O. bogotensis* . . . (p. 184) the cranial characters show it to be a member of the group of *Oxymycteri* which contains *O. bogotensis* Thomas and *O. lanosus* Thomas." (In 1909 it was made type of *Microxus*.)

1901*b*. Thomas described (p. 530) *Oxymycterus roberti*, n. sp., comparing it with *nasutus*.

1902*a*. Thomas gave color notes (p. 62) upon *iheringi*.

1902*b*. Thomas described (p. 139) *Oxymycterus paramensis*, n. sp., allied to *roberti* of Minas Geraes.

1903*a*. Thomas described (p. 226) *Oxymycterus quaestor*, n. sp., "allied to *O. nasutus*." He compared it with *nasutus* and *hispidus* and with *O. rostellatus*.

1903*b*. Thomas described (p. 489) *Oxymycterus delator*, n. sp., a markedly distinct form.

1903. J. A. Allen described (p. 189) *Oxymycterus microtis*, n. sp. (a *Notiomys*).

1905. J. A. Allen re-characterized (p. 82) the genus *Oxymycterus*, comparing several of the species together. He gave further descriptions of *lanosus* and *microtis* (the latter according to Osgood, 1925, = *Notiomys michaelseni*).

1905. Cabrera described (p. 15) *Oxymycterus delfini*, n. sp. (perhaps a *Microxus*).

1909. Thomas, revising the *Oxymycterus* alliance of species, divided (pp. 235–239) *Oxymycterus* into three genera: *Oxymycterus* (restricted), *Lenoxus*, n. g., and *Microxus*, n. g.

Lenoxus contained only *apicalis*.

Microxus, with type *mimus*, contained also *bogotensis*, *lanosus* and *iheringi*.

He described *Oxymycterus angularis*, n. sp., allied to *hispidus* and *Oxymycterus judex*, n. sp., which he compared with *quæstor*.

1914. Thomas described (p. 244) *Oxymycterus platensis*, n. sp., "closely allied to *O. rufus*."

1916*d*. Thomas described (p. 478) *Oxymycterus doris*, n. sp., allied to *juliacæ* and *inca*.

1921*c*. Thomas described (p. 615) *Oxymycterus akodontius*, n. sp., which he compared with *paramensis*.

1925*a*. Thomas described (p. 580) *Oxymycterus paramensis jacentior*, n. subsp.

1931. Sanborn described (p. 1) *Oxymycterus misionalis*, n. sp.

NOTIOMYS Thomas

1844. Waterhouse described (p. 154) *Hesperomys megalonyx*, n. sp.

1847. Gay described (p. 108) *Oxymicterus* (*sic*) *scalops* (n. sp.).

Note.—I have compared skulls of *Chræomys pulcherrimus*, *Abrothrix longipilis*, and *Notiomys* species with that part of the skull of *scalops* shown in Gay's Pl. VI, fig. 3 and, both on the basis of the pattern of the teeth and of the wide flare of the zygoma from the zygomatic plate, I have concluded that *scalops* Gay must have been a *Notiomys*. Furthermore, the tail of *scalops* was far too short to be that of a *Chræomys*.

1858. Philippi described (p. 303) *Oxymycterus valdivianus* (n. sp.) and remarked upon its nearness to *megalonyx*.

1872. Philippi described (p. 445) *Oxymycterus niger* (n. sp.), comparing it with *megalonyx*, *valdivianus*, and *scalops*.

1891. Thomas, in Milne-Edwards, described (p. 24) *Hesperomys* (*Notiomys*) *edwardsii* (n. sp.), *Notiomys* representing a new subgenus of *Hesperomys*.

1894. Thomas described (p. 362) *Acodon macronyx*, n. sp., comparing it with *valdivianus* and *niger*.

1896*a*. Thomas raised (p. 1020) *Notiomys* to generic rank.

1898. Trouessart listed (p. 540) only *edwardsii* in *Notiomys*. *Valdivianus*, *niger*, *megalonyx*, and *macronyx* were placed in *Akodon* (pp. 537, 538).

1898. Matschie commented upon (p. 4) *Hesperomys* (*Acodon*) *valdivianus* (Philippi) and described (p. 5) *Hesperomys* (*Acodon*) *michaelseni*, n. sp.

1900. Philippi described (p. 57) *Mus microtis*, a young specimen from Maule, Chile, with tail length 33 mm. and claws of the manus 5 mm. It was figured on Pl. xxv, fig. 2, and the tiny ears and large claws are easily noted.

This name, if referable to *Notiomys*, preoccupied *microtis* Allen (1903).

1903. J. A. Allen described (p. 189) *Oxymycterus microtis*, n. sp., preoccupied ? by *microtis* Philippi (1900).

1903*c*. Thomas erected (p. 242) *Chelemys*, n. subg. of *Akodon* with type *Hesperomys megalonyx* ("*Akodon megalonyx*") and described *Akodon* (*Chelemys*) *vestitus*, n. sp. He distinguished (p. 243) the new subgenus from *Notiomys*. He suggested that both *michaelseni* and *microtis* Allen belonged in *Notiomys*.

1905. J. A. Allen characterized (pp. 78–80) "*vestitus*" (renamed *vestitus alleni* by Osgood, 1925) and *michaelseni* under *Akodon* (*Chelemys*) and (p. 81) *edwardsii* under *Notiomys*.

1919*b*. Thomas proposed (p. 209) *Geoxus*, n. g., with type *Oxymycterus valdivianus* Philippi and described (p. 208) *Geoxus fossor*, n. sp.

He supported Allen's (1905) assertion that *microtis* Allen was not closely related to *Notiomys*, thus reversing his own opinion of 1903; and he linked *microtis*, *michaelseni*, and *valdivianus* together under *Geoxus*. On page 209 *Notoxus*, misprint for *Geoxus*, occurs.

He still considered (p. 207) *Chelemys* a distinct genus.

1925. Osgood revised (pp. 113–125) the genus *Notiomys*, placing *Chelemys* and *Geoxus* in its synonymy. He listed (p. 119) *microtis* Allen in the synonymy of *michaelseni* and questioningly *niger* in that of *megalonyx*.

He described *valdivianus araucanus*, n. subsp., *valdivianus chiloensis*, n. subsp., *connectens*, n. sp., and *vestitus alleni*, n. subsp. (this last based upon specimens determined by Allen, in 1905, as *vestitus*).

1927*b*. Thomas selected (p. 551) the lectotype of "*Chelemys megalonyx*," male, 44.10.7.37 of the British Museum collection, from Lake Quintero, Chile, with lectoparatype, 43.12.30.39, Lake Quintero.

1927*c*. Thomas described (p. 654) *Chelemys vestitus fumosus*, n. subsp., and *Chelemys angustus*, n. sp., allied to *Notiomys connectens*. He criticized (pp. 655–656) Osgood's union of *Chelemys*, *Notiomys*, and *Geoxus* in a single genus (mentioning that the type of *edwardsii* is now in the British Museum, No. 18. 12.21.1), and maintained that *Notiomys* was markedly distinct from *Chelemys* and *Geoxus*. But he admitted that the last two genera might be "annectant."

1929. Thomas recorded (p. 42) a well-made, well-measured specimen of *edwardsii*, commenting upon the "excessively small ears."

BLARINOMYS Thomas

1877. Winge described (p. 34) *Oxymycterus breviceps*, n. sp., based upon fossil material from a cavern in Lagoa Santa.

1896*b*. Thomas erected (p. 310) *Blarinomys*, n. g., to contain *Oxymycterus breviceps* Winge.

Goeldi had sent Thomas a recent specimen from near Rio de Janeiro, and on the basis of that animal Thomas drew up his specific description and set up his new genus.

It seems to me that *talpinus* Lund, whose humerus that author described (1841, p. 276) as distinctly fossorial in character, may belong in *Blarinomys*.

1902. Goeldi recorded (p. 167) the finding of his specimen of *Blarinomys breviceps* and reviewed the history of the genus.

PRESENT STATUS OF THE GENERA AND SUBGENERA

Genus *Thalpomys* Thomas	Type by original designation: *Mus lasiotis* Lund
Genus *Deltamys* Thomas	Type by original designation: *Deltamys kempi* Thomas
Genus *Thaptomys* Thomas	Type by original designation: *Hesperomys subterraneus* Hensel
Genus *Hypsimys* Thomas	Type by original designation: *Hypsimys budini* Thomas
Genus *Bolomys* Thomas	Type by original designation: *Akodon amœnus* Thomas
Genus *Chroeomys* Thomas	Type by original designation: *Akodon pulcherrimus* Thomas
Genus *Abrothrix* Waterhouse	Type by original designation: *Mus longipilis* Waterhouse
Genus *Scotinomys* Thomas	Type by original designation: *Hesperomys teguina* Alston

Genus *Akodon* Meyen	Type by monotypy: *Akodon boliviensis* Meyen
Subgenus *Akodon* Meyen	
Subgenus *Chalcomys* Thomas	Type by original designation: *Akodon aerosus* Thomas
Genus *Microxus* Thomas	Type by original designation: *Oxymycterus mimus* Thomas
Genus *Podoxymys* Anthony	Type by original designation: *Podoxymys roraimae* Anthony
Genus *Lenoxus* Thomas	Type by original designation: *Oxymycterus apicalis* Allen
Genus *Oxymycterus* Waterhouse	Type by monotypy: *Mus nasutus* Waterhouse
Genus *Notiomys* Thomas	Type by monotypy: *Notiomys edwardsi* Thomas
Genus *Blarinomys* Thomas	Type by original designation: *Oxymycterus breviceps* Winge

List of Named Forms with Type Localities

The method of grouping the species of large genera geographically has been used in this paper for the subgenus *Akodon* only. A map showing the geographical areas is reproduced herewith. For fuller definitions of the areas, the original paper (Amer. Mus. Novit., 1932, No. 579) should be consulted.

Thalpomys	
lasiotis (Lund)	Lagoa Santa, Brazil
Deltamys	
kempi Thomas	Isla Ella, delta of Rio Parana, Argentina
Thaptomys	
nigrita (Lichtenstein)	Region of Rio de Janeiro, Brazil
subterraneus subterraneus (Hensel)	In burrows in forest, Rio Grande do Sul, Brazil
subterraneus henseli (Leche)	Taquara do Mundo Novo, Rio Grande do Sul, Brazil (received from von Ihering)
Hypsimys	
budini Thomas	Leon, Jujuy, Argentina, 1500 m.
deceptor Thomas	Higuerilla, Dept. of Valle Grande, 10 miles east of Zenta Range and 20 km. east of town of Tilcara, Jujuy, Argentina, 2000 m.

Bolomys

When first he erected *Bolomys*, Thomas apparently considered it a rather distinct division of *Akodon*, inhabiting the higher parts of the southern Andes. His later remarks (see *Akodon*, 1925) to the effect that *lactens* and *orbus* belonged in a single group with *obscurus*, *lenguarum*, and *benefactus* seemed, however, to belie this. In 1926 he again wrote of *lactens*, a species from relatively low country, under the generic name

Bolomys. *Orbus* and *gossei* are only doubtfully referred by me to *Bolomys*.

Philippi's species *andinus*,[1] treated by Thomas as a *Bolomys*, was described as having the long claws, dark dorsal color, and Andean distribution of that genus. His figure, however, rather resembles a subadult *Abrothrix longipilis*.

andinus (Philippi)	High Andes, of Prov. of Santiago, Chile
albiventer (Thomas)	Lower Cachi, Prov. of Salta, Argentina
berlepschii (Thomas)	Esperanza, Mt. Sahama, Bolivia, 4000 ft.
amœnus (Thomas)	Calalla, Rio Colca, near Sumbay, Peru, 3500 m.
jucundus (Thomas)	Cerro de la Lagunita, east of Maimara, Jujuy, Argentina, 4500 m.
lactens (Thomas)	Leon, Jujuy, Argentina, 1500 m.
orbus (Thomas)	Otro Cerro (45 kilometers west of Chumbicha), Rioja, Argentina, 3000 m.
gossei (Thomas)	Puente del Inca, Andes of Mendoza, Argentina, 10,000 ft.
negrito Thomas	Las Paras, Aconquiza, Tucuman, Argentina, 4000 m.

Chrœomys

Akodon-like mice, colored dark fuscous brown, white, and chestnut, which inhabit the high Andes of Peru, Bolivia, and northern Chile.

jelskii jelskii (Thomas)	Junin, Central Peru.
jelskii pyrrhotis (Thomas)	Maraynioc, Central Peru.
pulcherrimus (Thomas)	Puno, Peru, 4000 m.
pulcherrimus cayllomæ (Thomas)	Caylloma, southeast Peru, 4300 m.
pulcherrimus inambarii (Thomas)	Limbane, Inambari River, upper River Madre de Dios, southeast Peru, 3400 m.
pulcherrimus cruceri (Thomas)	Crucero, on pass between Puno and upper Inambari River, southeast Peru, 4550 m.
bacchante bacchante (Thomas)	Choro, northwest of Cochabamba, Bolivia, 3500 m.
bacchante sodalis (Thomas)	Cerro de la Langunita, east of Maimara, Jujuy, Argentina, 4500 m.
inornatus Thomas	Ollantaytambo, Cuzco Region, Peru, 13,000 ft.

Abrothrix

This genus, as restricted by Thomas in 1916, represents a group of medium to large-sized akodonts inhabiting the lowlands (excepting *illutea*) of Chile and Argentina, adjoining the Andes. Probably the greatest altitude reached by most members of the genus is 4000 ft.

[1]It is doubtful whether Thomas thought of *andinus* and *gossei* as *Bolomys*. He compared them with *jucundus* which in 1913 he had compared with *alviventer* and *puer*.

longipilis (Waterhouse)	Coquimbo, Chile
brachiotis (Waterhouse)	On a little island near Midship Bay, Chonos Archipelago, Chile
brevicaudata (Philippi)	Puerto Montt, Valdivia, Chile
hirta hirta (Thomas)	Fort San Rafael, Mendoza, Argentina
hirta suffusa (Thomas)	Valle del Lago Blanco, Cordillera region of southern Chubut, Argentina
hirta modestior Thomas	Maiten, upper Chubut River, 42° S., 71° W., Argentina
hirta mœrens Thomas	Beatriz, Nahuel Huapi, Nequen, Argentina, 800 m.
hirta nubila Thomas	Estancia, Alta Vista, Lago Argentino, Santa Cruz, Argentina, 600 m.
francei (Thomas)	Santa Maria, Tierra del Fuego.
illutea Thomas	Concepcion, Tucuman, Argentina, 400 m. (corrected in 1929 to 3000–4000 meters)
Scotinomys	
teguina teguina (Alston)	Coban, Guatemala
teguina apricus (Bangs)	Boquete, Chiriqui, Panama, 4000 to 5000 ft.
xerampelinus (Bangs)	Volcan de Chiriqui, Panama, 10,300 ft.
irazu (Allen)	Volcan de Irazu, Costa Rica

Akodon (*Chalcomys*)

In the subgenus *Chalcomys* we have apparently a group of akodonts of the humid subtropics, rather closely confined to the forested eastern slopes of the Andes, except in Colombia, where it occurs in the valleys of the Cauca and Magdalena rivers and in eastern Venezuela and Trinidad, where it descends in suitable environments almost to sea-level. A *Chalcomys* is present on the upper parts of Mts. Duida and Roraima of the Guyana Mountains. On the Pacific side of the Andes it seems to be replaced by the very similar-appearing *Oryzomys* (*Melanomys*).

I feel fairly convinced that *dayi* is a *Chalcomys*. The extension of distribution into eastern Bolivia suggests that one or more of the akodonts of Brazil—*fuliginosus*, *caniventer*, etc.,—may ultimately be shown to belong in *Chalcomys*.

urichi Allen and Chapman	Caparo, Trinidad
venezuelensis Allen	Quebrada Seca, near Cumana, Prov. Sucre, Venezuela
meridensis Allen	Mérida, Venezuela, 1630 m.
tolimæ Allen	Rio Toché, Quindio Andes, Tolima, Colombia, 7000 ft.
chapmani Allen	Chipaque, Eastern Andes, Colombia, 8500 ft.
ærosus ærosus Thomas	Mirador, Baños, Ecuador, 1500 m.
ærosus baliolus Osgood	Inca Mines, Inambari River, Peru
dayi Osgood	Todos Santos, Chaparé River, Bolivia

Akodon (*Akodon*)

It will be seen that with the exception of the *mollis* group, which extends north of the equator along the Andes and along the western coastal strip of South America, the subgenus *Akodon* is almost confined to the southern half of South America and is excluded apparently from Amazonia (Region 6). However I have collected a species of *Akodon* just east of Pará.

Due to the conflicting views held from time to time by Thomas concerning the probable relationships of the species of *Akodon*, I have been unable to reach any definite conclusion regarding his groups of species, although such doubtless will be worked out eventually. Accordingly, I have again listed them under general regional headings with the hope that in this way some relationships at least may be suggested.

Region 3 (Andes north of Chile)[1]

punctulatus Thomas	Pallatanga (?) Ecuador
mollis altorum Thomas	Cañar, Prov. Azuay, Ecuador
mollis orophilus Osgood	Six miles west of Leimabamba (in mountains near headwaters of Utcubamba River), Peru
mollis orientalis Osgood	Poco Tambo, between Chachapoyas and Rioja, Peru, 6000 ft.
surdus Thomas	Huadquiña, Cuzco Region, Peru, 5000 ft.
boliviensis Meyen	Village of "Pichu-pichun," western cordillera, Peru, 14,000 ft. (Probably on Mt. Pichu-pichu, near Arequipa)
lutescens Allen	Tirapata, Peru, 15,000 ft.

Region 4 (coast, from Ecuador to northern Chile)

mollis mollis Thomas	Tumbez, northwestern Peru

Region 7 (Ceará to Matto Grosso and northern Chaco, Jujuy, etc.)

cursor (Winge)	Lagoa Santa, Brazil
lenguarum Thomas	Waikthlatingmayalwa, northern Chaco, Paraguay
toba Thomas	Jesematathla, northern Chaco, Paraguay, 100 m.

Region 8 (southern Brazil and Paraguay)

fuliginosus (Wagner)	Ypanema, São Paulo, Brazil
serrensis serrensis Thomas	Roça Nova, on railway between Paranangua and Curitiba, Prov. Parana, Brazil, 1000 m.
serrensis leucogula (Ribeiro)	Retiro de Ramos, Serra Itatiaya, São Paulo, Brazil
caniventris (Wagner)	Brazil
montensis Thomas	Sapucay, Paraguay

[1]For explanation and map of geographical regions, see Amer. Mus. Novitates, No. 579, 1932, pp. 12–14.

Region 9 (Pampas)

arenicola arenicola (Waterhouse)	Maldonado, Uruguay
arenicola hunteri Thomas	Isla Ella, delta of Rio Parana, Argentina
obscurus (Waterhouse)	Maldonado, Uruguay
azaræ (Fischer)	32½° S (=latitude of Entre Rios) Argentina
benefactus Thomas	Bonifacio, southwest Buenos Ayres Province, Argentina
dolores Thomas	Yacanto, near Villa Dolores, southwestern slopes of Sierra de Cordova, Argentina, 900 m.
glaucinus Thomas	Chumbicha, 60 kilom. southwest of Catamarca, Argentina, 600 m.
cænosus Thomas	Leon, Jujuy, Argentina, 1500 m.
sylvanus sylvanus Thomas	Sunchal, Sierra de Santa Barbara, southeastern Jujuy, Argentina, 1200 m.
sylvanus pervalens Thomas	Carapari, 35 km. north of Yacuiba, Tarija, Bolivia, 1000 m.
tartareus Thomas	Tartagal, Salta, Argentina, 600 m.
tucumanensis Allen	Tucuman, Argentina
spegazzinii Thomas	Lower Cachi, Prov. Salta, Argentina
nucus Thomas	Chos Malal, 37° S., Nequen, Argentina
neocenus Thomas	Rio Limay, Rio Negro, Nequen, Patagonia
iniscatus iniscatus Thomas	Valle de Lago Blanco, Koslowsky region, Patagonia, 46° S.
iniscatus collinus Thomas	Maiten, West Chubut, Argentina, 700 m.

Region 10 (slopes of the southern Andes at high altitudes)

fumeus Thomas	Choro, northwest of Cachabamba, Bolivia, 3500 m.
puer Thomas	Choquecamate, northwest of Cochabamba, Bolivia, 4000 m.
pacificus Thomas	La Paz, Bolivia, 4000 m.
varius varius Thomas	Tapacari, west of Cochabamba, Bolivia, 3000 m.
varius simulator Thomas	Villa Nouges, San Pablo, Tucuman, Argentina, 1200 m.
rupestris (Gervais) ?	High mountains of Cobija, Bolivia
leucolimnaeus Cabrera	Laguna Blanca, Catamarca, Argentina, 3100 m.
alterus Thomas	Chumbicha, 60 km. southwest of Catamarca, Argentina
beatus Thomas	Beatriz, Nahuel Huapi, north western Patagonia

Region 11 (Chilean lowlands)

olivaceus (Waterhouse)	Valparaiso, Chile
pusillus (Philippi)[1]	Valparaiso, Chile
brevicaudatus (Philippi)[1]	Puerto Montt, Chile

[1]Probably synonyms of *olivaceus*.

Region 12 (arid southern Patagonia)

canescens (Waterhouse)	Port Desire, Patagonia
xanthorhinus (Waterhouse)	Santa Cruz, Patagonia

Microxus

It is difficult to understand how such strongly akodont species as *torques*, *bogotensis*, and *affinis* were originally placed in *Oxymycterus* (*sensu lato*) rather than in *Akodon*. Once this had been done, however, it was inevitable that species which differed so markedly from the truly oxymycterine genera *Oxymycterus* (*sensu stricto*) and *Lenoxus* should very soon be set off from those as a separate genus. Thus *Microxus* was erected. Most of the discussion of recent years hinges upon efforts to keep separate the two groups *Akodon* (*sensu lato*) and *Microxus*, which obviously are very close allies.

If we abandon the idea that the species in question are intimately related to *Oxymycterus*, we can readily see that they fit closely into the *Akodon* complex. Considered in this way, the dark-colored *affinis* of Colombia appears to be a *Chalcomys*, and *torques*, *orophilus*, and *orientalis* of Peru seem to belong in the *mollis* group. Furthermore, it will be noted that in 1927 Thomas reached the conclusion that *torques* should be removed to *Akodon*. Perhaps that character which has been chiefly invoked to separate *Microxus* from *Akodon* and to ally it with *Oxymycterus*—the slope of the zygomatic plate—is less important than it appeared to be at first sight. In listing the species, however, I have provisionally left *torques* and *affinis* in *Microxus*.

iheringi (Thomas)	Taquara, Rio Grande do Sul, Brazil
lanosus (Thomas)	Monteith Bay, Straits of Magellan
mimus (Thomas)	Limbane, Dept. of Puno, Peru, 2600 m.
bogotensis (Thomas)	Plains of Bogotá, Colombia
affinis Allen	San Antonio, near Cali, Cauca, Colombia, 8000 ft.
torques Thomas	Matchu Picchu, Cuzco Region, Peru, 10,000 ft.
latebricola Anthony	Hacienda San Francisco, east of Ambato, on Rio Cusutagua, Ecuador, 8000 ft.
delphini (Cabrera)	Punta Arenas, Patagonia

Podoxymys

roraimæ Anthony	Summit of Mt. Roraima, British Guiana

Lenoxus

apicalis (Allen)	Juliaca, Peru, 6000 ft.

Oxymycterus

This genus (*sensu stricto*) appears to extend from the coast of Brazil (from Pernambuco southwards to Uruguay), across the Matto Grosso

and Chaco country to the Andes of Central Peru, Bolivia, and northern Argentina. True *Oxymycterus* appears to be absent from Chile.

angularis Thomas	São Lourenço, near Pernambuco, Brazil
dasytrichus (Wied)	Type locality not fixed. One specimen from R. Mucuri; another from Camamu, south of and not far from Bahia de Todos Santos, Brazil
rostellatus (Wagner)	Eastern Brazil
quaestor Thomas	Roça Nova, on railway between Paranangua and Curitiba, Prov. Parana, Brazil, 1000 m.
roberti Thomas	Rio Jordao, district of Araguary, southwest Minas Geraes, Brazil
hispidus (Pictet)	Bahia, Brazil
judex Thomas	Joinville, Santa Catharina, Brazil
nasutus (Waterhouse)	Maldonado, Uruguay
platensis Thomas	Enseñada, Rio Santiago, La Plata, Argentina
rufus (Desmarest)	No definite locality. Taken near a stream. Another specimen, Azara's HOCICUDO (1802) was shot in an arroyo in Entre Rios, Argentina
delator Thomas	Sapucay, Paraguay
doris Thomas	Charuplaya, upper Mamoré River, 65° 5′ W., 16° S., Bolivia, 1350 m.
iris Thomas	San Ernesto, near Mapiri, Mapiri River, upper Beni River, Bolivia, 1000 m.
inca Thomas	Perené River, Ucayali watershed, Dept. of Junin, Peru, 800 m.
juliacæ Allen	Juliaca, Peru
paramensis paramensis Thomas	Choquecamate, northwest of Cochabamba, Bolivia, 4000 m.
paramensis jacentior Thomas	Carapari, 35 km., north of Yacuiba, Tarija, Bolivia, 1000 m.
akodontius Thomas	Higuerilla, Dept. Valle Grande, 10 km. east of Zenta Range and 20 km. east of towns of Tilcara, Jujuy, Argentina, 2000 m.
misionalis Sanborn	Caraguatay, R. Paranay, Prov. Misiones, Argentina

Notiomys (including *Chelemys* and *Geoxus*)

scalops (Gay)	In fields in the Central Provinces, Chile
megalonyx (Waterhouse)	Lake Quintero, Chile
valdivianus valdianus (Philippi)	Near Valdivia, Chile
valdivianus chiloensis Osgood	Quellon, Chiloe Island, Chile
valdivianus araucanus Osgood	Tolhuaca, Prov. Malleco, Chile
niger (Philippi)	Peine, Prov. of Peine, Chile
macronyx (Thomas)	Near Fort San Rafael, Prov. of Mendoza, Argentina
edwardsii Thomas	South of Santa Cruz, towards 50° S. lat., Patagonia

michaelseni (Matschie)	In mountain forest, Punta Arenas, Patagonia
vestitus vestitus (Thomas)	Valle del Lago Blanco, cordillera region of southern Chubut Territory, Patagonia
vestitus alleni Osgood	Upper Rio Chico, Santa Cruz, S. Argentina
vestitus fumosus (Thomas)	Sierra de Pilpil, 15 km. south of San Martin, 40° 15′ S., 71° 20′ W. southwest Nequen Territory, Argentina, 1200–2000 m.
microtis Philippi	Prov. Maule, Chile
microtis Allen (preoccupied by *microtis* Philippi?)	Pacific slope of cordillera, near headwaters of Rio Chico de Santa Cruz, Patagonia
fossor (Thomas)	Maiten, Western Chubut, Argentina, 700 m.
connectens Osgood	Villa Portales, Prov. Cautin, Chile
angustus (Thomas)	Bariloche, east of Lake Nahuel Huapi, Nequen, Argentina, 800 m.
Blarinomys Thomas	
breviceps (Winge)	Fossil skull: in caves at Lagoa Santa, Brazil. Recent specimen: Colonia Alpina, Theresopolis, Rio de Janeiro, Brazil

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